

To: Mayor Gloria Whitehead

October 29, 2020

From: Ordinance Review Committee

Subject: Review of impervious cover calculation for swimming pools, Chapter 50, Water Quality Ordinance

On September 18, 2020, the committee was asked to review the impervious cover ordinance as it relates to swimming pools in the City of Woodcreek.

The Committee received input from Tom Hegemeier, P.E., of Doucet and Associates, Inc. and from Nick Dornak, Director of Watershed Services, The Meadows Center for Water and the environment, Texas State University. Their input was specifically requested by the Woodcreek City Council. The committee met on October 5, 2020 and discussed the matter after reviewing the materials and information available to the committee.

It is the recommendation of the Committee that no change be made to the existing impervious cover calculation of the horizontal water surface area of an in ground swimming pool. The committee's analysis follows below.

Basis for the Recommendation

In reaching its recommendation the Committee considered the importance of the following factors recognized in the existing Water Quality Ordinance, Impervious Barrier calculations:

- (1) to protect degradation and pollution of ground water resources-specifically aquifer protection and supply;
- (2) the need to protect the springs and creeks that enhance the quality of life, property values, and critical aquatic habitat and
- (3) to control and manage the quality of storm water runoff and the sediment load in that runoff.

Additional factors recognized by the Committee include:

- (1) the generally small lot sizes in the City of Woodcreek;
- (2) the unique hydrology and natural beauty of Woodcreek;
- (3) the lack of storm water infrastructure in the City of Woodcreek; (
- 4) the critical interrelationship between surface water and groundwater;
- (5) the importance of Woodcreek to act consistently with adjacent communities which share the Wimberley Valley watershed. It was noted that the City of Wimberley incorporated the same impervious cover allocation as the City of Woodcreek. The adjacent City of San 30 Item 8. Marcos also incorporated the same one hundred percent impervious cover allocation for swimming pool horizontal surfaces;
- (6) the acknowledgment that swimming pools do not allow for infiltration of rainwater;

(7) the reality that swimming pools do not serve as a usable source of rainwater collection due to pollution from chemicals and/or salt water, both potentially detrimental on vegetation and soil; and

(8) the recognition that swimming pools result in significant loss of water storage due to evaporation.

As an alternative to changing the impervious cover calculation, the Committee encourages property owners wishing to add an in ground swimming pool to consider ways to decrease the existing impervious cover on their lots. Property owners could pursue steps such as the use of pervious pavers to replace impervious parking, driveway, and pathway surfaces in order to meet the impervious cover limit.

It should be noted that the Committee did not have any data available on the number of in ground swimming pools already constructed in the City; nor did it have data available to consider how many property owners would potentially pursue future construction of an in ground pool were the impervious cover computation be decreased from one hundred percent to fifty percent. The Council may wish to gather the above-noted data in the forthcoming comprehensive survey of the citizens of Woodcreek. In addition, the survey could query citizens' interest in construction of a single community pool to be located where impact to the groundwater and hydrology of Woodcreek could be mitigated. Such an inquiry would necessarily also need to include follow-up questions on the citizens' willingness to fund initial construction and maintenance of the pool amenity. Given the general perception, not yet subject to empirical data - that the demographics of the city are shifting to younger families, there might be interest in a community pool.